

STATE OF VERMONT
PUBLIC SERVICE BOARD

Docket No. 7589

Petition of Central Vermont Public Service Corporation)
for a Certificate of Public Good approving the purchase)
of electricity pursuant to a Power Purchase Agreement)
with Granite Reliable Power, LLC)

Hearing at
Montpelier, Vermont
March 22, 2010

Order entered: May 13, 2010

PRESENT: Lars Bang-Jensen, Hearing Officer¹

APPEARANCES: Jeanne E. Burns, Esq.
Morris L. Silver, Esq.
for Central Vermont Public Service Corporation

Laura Beliveau, Esq.
for Vermont Department of Public Service

I. INTRODUCTION

Central Vermont Public Service Corporation ("CVPS" or "Company") proposes to enter into a power purchase agreement ("PPA") with Granite Reliable Power, LLC ("Granite"), for a portion of the capacity, energy and associated Renewable Energy Certificates ("RECs") from a 99 MW wind project, consisting of up to 33 wind turbines, that is under development in Coos County, New Hampshire (the "Project"). The proposed PPA would meet approximately 4% of the annual energy requirements of CVPS and has a term of 20 years.

1. Due to work schedule considerations, Lars Bang-Jensen replaced Ed McNamara as the Hearing Officer in this docket following the Technical Hearing.

The purchase by CVPS from outside Vermont of electric capacity or energy representing more than one percent of its historic peak demand for a term exceeding five years requires the issuance of a certificate of public good ("CPG") by the Public Service Board ("Board") under 30 V.S.A. § 248(a)(1). Before issuing a CPG under Section 248 with respect to such purchase, the Board must find that the purchase will promote the general good of the state and that the applicable criteria set forth in Section 248(b) are satisfied. As set forth below, I find that the proposed purchase of power under the PPA satisfies the applicable criteria under Section 248(b) and will promote the general good of the state and, accordingly, recommend to the Board that it issue a CPG.

Over the next several years, CVPS will need to replace a significant portion of its committed power resources as existing supply arrangements expire. The PPA results from a competitive solicitation process and is intended to provide a long-term, stably priced source of renewable power to meet a relatively small portion of the anticipated need for new power-supply commitments.

II. PROCEDURAL HISTORY

CVPS filed its petition for a CPG, together with prefiled testimony and exhibits, on January 15, 2010. CVPS requested that the Board find that the purchase of energy and capacity under the PPA meets the applicable requirements of 30 V.S.A. § 248(b) and will promote the general good of the state. CVPS also requested that the Board find that the cost of purchases under the PPA, taking into account the economic and environmental attributes of the resource, to be economically used and useful for rate-making purposes.

Included with the petition were the prefiled testimonies of William J. Deehan, James C. Cater, Kirk W. Shields, Kim L. Jones and Timothy O. Upton and related exhibits. Redacted and confidential versions of certain exhibits, including the PPA, were also filed with the Petition as was a motion for a protective order to protect certain confidential information. On February 9, 2010, CVPS filed an additional motion for approval of a protective order to facilitate discovery in this proceeding.

This docket was consolidated for purposes of hearings with Docket 7590, which concerns the related petition of Green Mountain Power Corporation ("GMP") to purchase power from the Project under a similar agreement with Granite. The hearing officers also sought to coordinate their efforts throughout the proceedings and in the development of proposals for decision to the extent that was possible given the somewhat different evidence CVPS and GMP each submitted in support of their respective petitions.

A prehearing conference was held jointly in both dockets on February 4, 2010. A Prehearing Conference Memorandum was issued on February 8, 2010, establishing a schedule that would be applicable if the parties reached a settlement. In a subsequent procedural order issued on March 4, 2010, an alternative schedule for a litigated proceeding was adopted. On March 30, 2010, a procedural order was issued regarding a protective agreement for allegedly confidential and proprietary information, which was supplemented by a protective order of the same date regarding certain prefiled exhibits and additional redactions to testimony.

A public hearing, which was noticed on February 18, 2010, was held jointly in this docket and in Docket 7590 on March 3, 2010, via Vermont Interactive Television at sites in Bennington, Brattleboro, Lyndonville, Middlebury, Montpelier, Randolph, Rutland, Springfield, St. Albans, Waterbury, Williston and White River Junction. No member of the public spoke at the public hearing or submitted comments. In addition, no motions to intervene in this proceeding have been filed.

In a letter filed on March 12, 2010, counsel for the Vermont Agency of Natural Resources ("ANR") indicated that ANR would not offer evidence or recommendations in this matter since the Petition did not involve issues related to Section 248(b)(5).

On March 15, 2010, CVPS filed a Memorandum of Understanding, dated March 12, 2010, between the Vermont Department of Public Service ("Department") and CVPS ("MOU") under which the parties agree that the PPA promotes the general good of the state and that a CPG should be issued.

On March 19, 2010, the Clerk of the Board issued a memorandum requesting that the parties address certain questions at the technical hearing. A technical hearing was jointly held in this docket and in Docket 7590 on March 22, 2010. At the technical hearing, the parties were

asked to brief their views on several areas of concern related to the fact that the PPA and GMP's similar agreement are the first power purchases to require Board approval since the creation of the Energy Efficiency Utility and the passage of the Sustainably Priced Energy Enterprise Development program ("SPEED").

A procedural order establishing a schedule for the filing of briefs was issued on March 26, 2010. CVPS filed a brief and proposal for decision on April 14, 2010. On the same date, the Department filed a letter with respect to, among other things, the proposed findings of fact submitted by CVPS.

In the MOU (exh. CVPS-DPS-1), filed on March 12, CVPS and the Department indicated they were unable to reach agreement on the request of CVPS for a "used and useful" determination with respect to power purchases under the PPA. CVPS requests that consideration of this issue be postponed until after the issuance of the CPG. Accordingly, this Order does not address this request by CVPS, although it is understood that CVPS may renew its request for a "used and useful" review if the Board issues the requested CPG.

III. FINDINGS

Based on the entire record, including the petition, the prefiled testimony, the evidence presented at the technical hearing, the MOU and the other admitted exhibits, I conclude that this matter is ready for decision and report the following findings to the Board in accordance with 30 V.S.A. § 8.

1. CVPS is a duly organized public service corporation with a principal place of business at 77 Grove Street, Rutland, Vermont, that provides electric service at the retail level to customers within its service area in Vermont. As a Vermont electric utility, CVPS is a "company" within the meaning of 30 V.S.A. § 201 and is subject to the jurisdiction of the Board and the applicable requirements of state law, including 30 V.S.A. §§ 203, 218c, 248 and 8001, *et seq.* Petition at 1-2.

2. CVPS has entered into a Power Purchase Agreement, dated December 16, 2009, with Granite, a Delaware limited liability company, to purchase a portion of the output of the Project, a planned wind generation facility known as the Granite Reliable Power Windpark. Shields pf. at

14; Petition at 2; exh. CVPS-KWS-6.

Description of Project and PPA

3. The Project will include up to thirty-three wind turbines, each with a capacity of 3 MW, resulting in an overall output rating of up to 99 MW. Shields pf. at 14; Petition at 2.

4. The Project will be located on private property in Coos County, New Hampshire. Shields pf. at 14; Petition at 2.

5. No elements of the Project will be located in Vermont. The closest element of the Project to Vermont will be at least ten miles from the border, with limited visibility from a single vantage point. No new transmission lines are required to import the purchased power into Vermont. Upton pf. at 2 and 3.

6. Subject to the approval by the Board of the proposed energy purchase under 30 V.S.A. § 248 and the timely completion of the Project, the PPA obligates CVPS to purchase 30.3% of the electric energy generated by the Project and associated RECs beginning on or after April 1, 2012, and continuing for a term of 20 years. Exh. CVPS-KWS-6.

7. CVPS will also purchase 30.3% of the Capacity Supply Obligation, as defined in ISO-New England, Inc. ("ISO-NE") protocols, actually delivered from the Project (as determined by ISO-NE) beginning on June 1, 2016, and continuing until the end of the term of energy purchases under the PPA. Exh. CVPS-KWS-6.

8. The Project will provide an intermittent power resource with both seasonal and diurnal patterns. Deehan pf. at 13.

9. CVPS will be required to purchase only the energy actually produced by the Project. Deehan pf. at 2.

10. Based on an expected annual capacity factor of approximately 35%, CVPS anticipates purchasing approximately 10.5 MW from the Project. The proposed purchase is expected to constitute approximately 4% of CVPS's annual energy requirements, and will represent more than one percent of the historic peak demand of CVPS. Deehan pf. at 2; Petition at 2.

11. Pricing for energy (including the RECs) under the PPA is fixed with a modest escalator and separated into peak and off-peak components so that the cost of actual MWhs produced reflects the relative value of those MWhs in the wholesale market. Shields pf. at 15.

12. Capacity prices under the PPA are also fixed and based on CVPS's 30.3% share of the actual MW of capacity as assigned to the project by ISO-NE and subsequently delivered to CVPS in settlement. Shields pf. at 15.

13. CVPS currently plans to resell the RECs into the market in order to reduce net power costs to customers, although they may be retained in the future depending on applicable requirements and hedging positions. The average resale price for the RECs is uncertain. Shields pf. at 16.

14. Power purchased from the Project will enhance the resource diversity of CVPS as it will be the first wind resource introduced into the supply portfolio of CVPS. Shields pf. at 16.

RFP Process, Screening and Evaluative Methodologies

15. The PPA results from a competitive solicitation and evaluation process designed to identify and select from among potential supply resources those that have the economic and non-economic attributes that best met the evaluation criteria developed by CVPS. These evaluation criteria were based in part on CVPS's understanding of state policy. Shields pf. at 2-13; Deehan pf. at 3.

16. The Project was identified as a potential resource through the Joint Request for Proposals ("RFP") initiated with Green Mountain Power Corporation ("GMP") and Vermont Electric Cooperative, Inc. and issued on November 14, 2008. Deehan pf. at 2; Shields pf. at 2.

17. The RFP was the beginning of a staged process to replace expiring supply contracts with a new, long-term, diverse supply portfolio that reflects Vermont policy preferences. Shields pf. at 4.

18. The primary objectives of the competitive solicitation process that resulted in the PPA were to:

- (a) procure up to 40 MW for CVPS starting in 2012;
- (b) create MW volume scale by partnering with other Vermont utilities;
- (c) attract proposals from resources that might otherwise not participate in a smaller solicitation;
- (d) develop and apply an objective screening process;
- (e) design and implement the RFP process to be repeatable for future solicitations; and,

(f) be regarded by the market as a fair and transparent process so participants will feel comfortable participating in subsequent solicitations.

Shields pf. at 5.

19. The RFP process was a means to engender competition among potential suppliers and obtain more favorable pricing. Shields pf. at 4.

20. Over 450 potential sellers were given notice of the solicitation, and 33 proposals were submitted in response to the solicitation. Shields pf. at 4-5; exh. CVPS-KWS-2.

21. Two rounds of proposals were received as part of the RFP process. In the first round, initial proposals were received from all interested participants. Following an initial screening by CVPS to identify the proposals viewed as most viable, CVPS asked 13 selected bidders to submit "best and final" proposals. Shields pf. at 5 and 11.

22. To help rank and evaluate the RFP proposals, CVPS utilized a "Scorecard" designed to consider and allocate appropriate weights for various evaluative attributes. Shields pf. at 6.

23. The Scorecard evaluated each of the proposals in terms of two economic attributes and eleven non-economic attributes. Each of the attributes was assigned a relative weight. CVPS assigned 60% of the total weight of the scoring to the economic attributes and 40% of the scoring to non-economic attributes. The proposals were each assigned a score from 0 to 6 on each of the Scorecard attributes based on judgments about the quality of the proposal relative to the attribute. Shields pf. at 8-11; exh. CVPS-KWS-4.

24. The Scorecard's two economic attributes were: (a) the expected cost of the resource; and (b) the expected volatility of the cost of the resource. The non-economic attributes assessed were: (a) credit requirements; (b) credit-rating-agency treatment; (c) the probability of development or contract performance; (d) renewable attributes; (e) environmental footprint; (f) SPEED eligibility; (g) in-state or out-of-state resource; (h) delivery point; (i) transmission-deferral benefits; (j) fuel diversity; and (k) resource diversity. Shields pf. at 9-10; Deehan pf. at 9; exh. CVPS-KWS-4.

25. After receiving responses from selected bidders on their "best and final" proposals, these proposals were re-scored and re-ranked. Shields pf. at 11-12

26. CVPS then applied quantitative techniques to model how the incorporation of the

highest-ranked proposals into the supply portfolio would affect the performance of the overall portfolio in terms of cost and cost risk. The portfolio model considers the expected impact of adding the economic characteristics of a specific resource to CVPS's ongoing resource mix, in light of the economic characteristics of what is already committed in the mix, and allows explicit consideration of how the pricing elements of each of the resources tend to vary in relation to one another in producing total cost variability. Cater pf. at 5; Deehan pf. at 3-4.

Shields pf. at 12.

27. Based on all these evaluative steps, CVPS determined which resources would best match CVPS's supply-resource needs in future years. Cater pf. at 5.

28. Of necessity, the evaluative process used by CVPS involves substantive trade-offs among competing objectives to assess the relative merits of submitted proposals. CVPS made judgments about such trade-offs in its selection and weighting of Scorecard attributes, the attribute scores assigned to each proposal, the assessment of the effect of a particular resource on the overall supply portfolio, and its ultimate determination as to the best matches for its supply portfolio. Shields pf. at 3 and 8-11; Cater pf. at 5-6; exh. CVPS-KWS-4.

29. The Project scored favorably compared to competing resources. It was not the least expensive in terms of absolute expected cost, nor did it receive the highest score for its non-economic attributes, but on a weighted-average basis considering all of its attributes, it ranked fifth overall among the top thirteen "best and final" proposals. In terms of wind-based proposals, it ranked first of the top three wind proposals received by CVPS. CVPS attempted to enter into contracts with the four resources that were ranked higher than the Project, entered into power purchase agreements with two of them, and was unable to reach agreement with the other two of them. Shields pf. at 6 and 12; tr. 3/22/10 at 55 (Shields); exh. CVPS-KWS-5.

The MOU

30. The parties to the MOU agree that the PPA is in the general good of the state, and that the Board should issue a CPG to that effect. The parties to the MOU also agree that the acquisition of power by CVPS under the PPA meets each of the applicable criteria under 30 V.S.A. § 248(b). Exh. CVPS-DPS-1 at 3-4.

Non-Applicability of Other Criteria

30 V.S.A. §§ 248(b)(1), 248(b)(5), 248(b)(9)

Section 248(b)(1) and (5) apply only to in-state facilities. Because the Project is located entirely in New Hampshire, the Board does not need to address these criteria. In addition, the Project does not involve a waste to energy facility for purposes of Section 248(b)(9).

Present and Future Demand for Service

30 V.S.A. § 248(b)(2)

31. The purchase by CVPS under the PPA is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures, including but not limited to those developed pursuant to the provisions of subsection 209(d), section 218c and subsection 218(b) of Title 30. *See* findings 32 to 38, below; Deehan pf. at 15; and exh. CVPS-DPS-1 at 3.

32. A significant portion of the committed supply resources included within CVPS's power portfolio are reaching the end of their term and will expire over the next six years. CVPS's portfolio will lose two major resources over the next five years. There are uncertainties associated with potential future purchases from CVPS's legacy sources – Vermont Yankee ("VY") and Hydro Quebec ("HQ"). Shields pf. at 4; and Deehan pf. at 11 and 14; Cater pf. at 12 and 13; exh. CVPS-WJD-5.

33. Currently, CVPS projects a significant gap in its resource portfolio between projected supply and consumer demand. Even when the power to be purchased under the PPA and other pending purchases is taken into account, the CVPS supply portfolio still projects a deficit, demonstrating a further need for power. Deehan pf. at 14; exh. CVPS-WJD-5.

34. When preparing its need analysis, CVPS took into account estimates of the system-wide energy efficiency programs being implemented within its service area by Efficiency Vermont, the state's energy efficiency utility. Tr. 3/22/10 at 61-62 (Cater).

35. The PPA will meet a relatively small portion of CVPS's future demand for service. Even when aggressive deployment strategies for efficiency services are taken into account, CVPS's need for replacement resources is much larger than the need met by the PPA. Given the need to replace existing supply arrangements of much greater magnitude, the need met by the

PPA could not otherwise be met more cost-effectively through efficiency programs and measures. Tr. 3/22/10 at 61-62 (Cater); Deehan pf. at 15.

36. Because the purchase is from a source of "new renewable energy," it furthers the state's renewable energy goals established under Chapter 89 of Title 30. Deehan pf. at 15.

37. Not including the PPA or potential allocations under the standard offer program of SPEED resources, CVPS currently has commitments for 25 GWh from new renewable energy sources (approximately, 1.1% of current annual load) that will count towards meeting the state objective under 30 V.S.A. § 8005(d)(2) that qualifying renewable resources account for 20% of statewide electric sales before July 2017. Tr. 3/22/10 at 25-30 (Deehan).

38. The annual load of CVPS has declined by approximately 100 GWh from 2004 to 2009. Tr. 3/22/10 at 25 (Shields and Deehan).

Discussion

With the expiration of major existing power-supply contracts over the next several years, the committed power-supply resources of CVPS will diminish significantly.² Accordingly, there is an established need for CVPS to enter into significant new supply arrangements to meet present and future demand for service. The PPA is intended to meet a small portion of this need.

It is apparent that the gap between present and future demand for service and the supply arrangements that CVPS currently has in place to meet that need beginning in 2012 is so great that future demand could not be entirely met in a more cost-effective manner through energy-conservation programs and measures and energy efficiency and load-management measures. While it is conceivable that the entire 10.5 MW of output that CVPS anticipates it will purchase under the PPA could be met in a more cost-effective manner through non-generation alternatives, this particular purchase should not be viewed in isolation. Rather, the PPA must be seen in a broader context in terms of the contribution (albeit, relatively small) that the PPA makes in bridging the large gap between future demand and the committed supply resources of CVPS. To

2. See exh. CVPS-WJD-5 for a graph titled "Current Status of CVPS Supply Demand Balance" for a showing of the magnitude of the anticipated shortfall between power demand and supply in future years as existing contracts expire.

do otherwise might have the perverse effect of discriminating against smaller and longer-term power-supply arrangements in favor of large and shorter-term supply contracts as non-generation alternatives could not fully offset the need that would be met by larger contracts and shorter-term arrangements would not require a CPG.³

The broader context of CVPS's overall need makes it clear, at least at this stage of the committed-power-supply replacement process, that this purchase is required to meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy-conservation programs and measures and energy efficiency and load-management measures.

The PPA results from the efforts of CVPS to enter into supply arrangements that further the resource selection policies established by Chapter 89 of Title 30. The power to be purchased from Granite Reliable will constitute "new renewable energy" as defined under 30 V.S.A. § 8002(3). Because CVPS is purchasing the power generated by the Project under a long-term contract, the purchase would count as an eligible resource for purposes of 30 V.S.A. § 8005(d)(1) and (2) under 30 V.S.A. § 8005(d)(3).

As Vermont's largest electric distribution utility, CVPS's power-supply portfolio will almost certainly need to include a significant component of new renewable resources if the renewable-resource objectives of Chapter 89, particularly the 20% goal set forth in Section 8005(d)(2), are to be achieved. New renewable resources currently account for approximately 1.1% of CVPS's annual load, not including the PPA or CVPS's future allocation of SPEED standard-offer resources. Even though the exact extent of CVPS's ultimate need for new renewable resources in 2017 is undetermined at this time, CVPS must give consideration to the new renewable objectives, policies and requirements set forth in Chapter 89 as it assembles a supply portfolio for the future (especially considering that the long-term nature of some supply commitments could make it difficult to realign its portfolio to include more new renewable resources in the future).

As CVPS observes in its brief:

3. Under Section 248(a)(1), a CPG is not required for purchase agreements with a term of five years or less.

[T]he resource selection policies established under Chapter 89 of Title 30 . . . encourage retail electricity providers to enter into affordable, long-term, stable-priced, renewable energy contracts that mitigate market price fluctuation for Vermont electricity consumers, and establish goals for the purchase of "new renewable energy" to serve Vermont loads. The Company believes that it is appropriate for the Board to take these policies into account when considering whether to issue CVPS a CPG for the Granite Reliable PPA under Section 248, and that construing section 248 to include consideration of Vermont's renewable and other energy policies would be consistent with the approach to interpreting statutes recognized by Vermont law.⁴

The Department appears to disagree with CVPS's contention that Section 248 should be construed to include consideration of renewable energy objectives and policies set forth in Chapter 89 of Title 30. The Department "believes that SPEED goals should not provide the basis for support of these contracts."⁵

The Department notes that the renewable portfolio standards in Section 8004(b) would require CVPS to rely on new renewable resources only to cover incremental energy growth from 2005 to 2012 and that current projections indicate that load growth will be negligible for that period. In addition, the Department observes that CVPS "would face minimal consequences" if it does not satisfy the goals set forth in Section 8005(d)(1).⁶

I am not persuaded by the Department's arguments that the emphasis CVPS places in support of the PPA on the furtherance of state renewable energy objectives is inappropriate. State law has established objectives for renewable energy that are relevant to the power supply portfolio decisions of Vermont electric distribution utilities such as CVPS. Based on the testimony offered in this docket, the Department appears correct in its assessment that load growth is likely to be negligible between 2005 and 2012, although some minor uncertainty remains. However, even if incremental load growth is minimal for purposes of the new-renewable-resource requirements in Section 8004(b)(1), the requirements of Section 8005(d)(1) and the objectives of Section 8005(d)(2) would still be relevant. Section 8005(d)(2) sets a state

4. CVPS Brief (4/15/10) at 3.

5. Department letter, filed on April 14, 2010, regarding briefs and proposed findings of fact filed by CVPS and GMP with respect to the approval of their purchases from Granite.

6. *Id.*

goal "to assure that 20 percent of total statewide electric retail sales before July 1, 2017 shall be generated by SPEED resources."⁷ The fact that there may be minimal or even no consequences for CVPS if the renewable-energy objectives and requirements set forth in state law are not achieved should not be relevant to CVPS's conduct as it takes account of such objectives and requirements in assembling its long-term supply portfolio. Aside from the effect of these objectives and requirements on CVPS, the policies, objectives and requirements of Chapter 89 (as well as the general state energy policy set forth in 30 V.S.A. § 202a) are relevant to the Board's decision-making process. The Board cannot ignore statutory objectives and policies in determining whether a particular power purchase or generation project promotes the general good of the state and justifies the issuance of a CPG.

Accordingly, any finding that purchases under the PPA further state renewable-energy objectives would support a determination that the PPA promotes the general good of the state under Section 248. Based on Board precedent, such a finding also appears relevant to the finding of need under Section 248(b)(2). In two recent dockets addressing the construction of renewable generation facilities by utilities, the Board has adopted findings that link goals for renewable resources to the demonstration of need under Section 248(b)(2).⁸ In addition, the proposal for decision submitted by CVPS indicates that it believes such a finding is relevant to the need determination under Section 248(b)(2) and in assessing the economic benefit to the state under Section 248(b)(4).⁹

In light of state renewable-energy objectives, policies and requirements as set forth in Chapter 89 of Title 30, CVPS's power supply portfolio will need to include some new renewable resources in a significant, but, as yet undetermined, amount. As such, there is sufficient basis to conclude that the purchase of new renewable resources under the PPA (constituting

7. Under Section 8005(d)(3), calculations of SPEED resources for purposes of Section 8005(d)(2) would include the power produced under the PPA because it would constitute electricity produced under a long-term contract with a Vermont utility that is new renewable energy, even though it is generated outside Vermont.

8. Docket 7514, Order of 7/24/09 at 4 (the only findings supporting need relate to furthering SPEED goals); Docket 7601, Order of 5/4/10 at 5-6 (findings on need related to renewable resource requirements and goals).

9. CVPS's Proposal for Decision filed on April 15, 2010, at 5 to 12.

approximately 4% of CVPS's current annual energy requirements) is required to meet the need for present and future demand for service. As CVPS suggests, the need for additional new renewable resources is also relevant to findings of economic benefit as discussed further below.

System Stability and Reliability
30 V.S.A. §§ 248(b)(3)

39. Neither the Project nor the transmission of power purchased under the PPA will adversely affect system stability or reliability. *See* findings 40 to 42, below; exh. CVPS-DPS-1 at 3.

40. A System Impact Study ("SIS") was conducted on behalf of ISO-NE for the interconnection of the Project. The SIS recommended certain upgrades that have been included in plans for the Project. Jones pf. at 3.

41. In July 2009, ISO-NE determined that the development of the facility with the upgrades described in Project plans will not have significant adverse impacts on the reliability or operating characteristics of the interconnected transmission facilities. Jones pf. at 3.

42. Vermont Electric Power Company, Inc. ("VELCO") participates in the ISO Reliability Committee and the task force that reviewed the study analysis. VELCO requested that ISO-NE model a stressed-case scenario for Vermont involving the Project, which concluded that there were no negative impacts in Vermont under the scenario. Jones pf. at 3.

Economic Benefit to the State
30 V.S.A. § 248(b)(4)

43. The purchase under the PPA will provide an economic benefit to the state. *See* findings 44 to 55, below; Deehan pf. at 16; and exh. CVPS-DPS-1 at 3.

44. Major existing contracts in CVPS's supply portfolio are scheduled to expire beginning in March of 2012. Shields pf. at 4; Deehan pf. at 11; exh. CVPS-WJD-5.

45. The PPA is the result of a competitive solicitation and evaluation process to identify and select among potential long-term sources of power those that had the economic and non-economic attributes that best met the evaluation criteria developed by CVPS, which were based in part on CVPS's understanding of Vermont policies. Shields pf. at 2 and 4-13; Deehan pf. at 3; *see* findings 15 to 29, above.

46. The PPA will provide a long-term, new reliable power source at prices that are relatively stable and compare favorably to the prices of other new renewable alternatives that are presently available. Deehan pf. at 16.

47. The Project represented the best of the available premium renewable project proposals under the RFP in terms of meeting new renewable energy standards under state law. Tr. 3/22/10 at 74 (Foley).

48. The incremental impact of the PPA on CVPS's portfolio cost and risk will depend on the composition of the remainder of its supply portfolio. The price of purchases under the PPA is slightly higher than current projections of market costs, but prices under the PPA are less volatile than market costs and should lower the risks of a supply portfolio with a large, market-based component. Cater pf. at 12-13.

49. Although the pricing of any future purchases from HQ and VY was not known at the time that the analysis of the Project was conducted, CVPS did run cases based on a reference portfolio in which it is assumed that a large portion of uncommitted requirements were met with a hypothetical set of fixed-price resources. This analysis shows that the inclusion of the PPA creates a trade-off by slightly lowering risk and slightly increasing cost. Cater pf. at 13-16.

50. The PPA is part of a strategy by CVPS to "ladder" its power purchases over time with varying contract durations to achieve a degree of price-averaging so as to limit risk. The PPA is consistent with the efforts of CVPS to diversify its power supply across technologies and fuel types. Deehan pf. at 11-12; *see* also exhs. CVPS-WJD-2, 3 and 4.

51. The purchase will also enhance the fuel and technology diversity of CVPS's power supply portfolio, by adding wind to the portfolio of committed resources. Shields pf. at 16.

52. CVPS has room for an intermittent wind source in its portfolio because purchase purchases under the PPA will represent a small share of total supply, and CVPS expects to consider the risks related to this intermittent resource as it adds other new resources. Deehan pf. at 13.

53. Most of the performance risk associated with the Project operation will rest with the seller because CVPS will only pay for energy, capacity, and RECs that are actually produced and delivered to the Company. Shields pf. at 15.

54. The PPA does not require CVPS or Granite to post collateral or provide financial assurances. Because of the 20-year term of the PPA, more rigorous collateral requirements would likely have made the PPA impractical for both parties because of the potential for imposing very large margin or collateral exposures. Shields pf. at 13.

55. RECs are included in the energy price as part of this purchase. Since CVPS is not currently subject to any general statutory requirement to retain and retire RECs, the current plan is to resell the RECs into the market in order to reduce net power costs to customers. If a renewable requirement arises in the future, CVPS may elect to retain the RECs. Shields pf. at 16.

Discussion

The PPA results from a competitive RFP solicitation process to find new power supply resources as CVPS begins a staged process of replacing supplies from expiring contracts. Before choosing to enter into the PPA with Granite, CVPS evaluated each of the submitted proposals in terms of certain economic and non-economic attributes. A sixty-percent weight was assigned to two purely economic factors (expected cost and cost volatility), and a forty-percent weight was assigned to "non-economic" factors. Although characterized as non-economic factors, most, if not all, of the non-economic factors considered by CVPS involve economic benefits (most obviously, collateral requirements, credit-rating-agency treatment and contract-performance risks).

CVPS designed its evaluative methodologies and tools to reflect, in part, its understanding of state energy and electric policies. These methodologies and tools were discussed in workshops during the consideration of CVPS's Integrated Resource Plan ("IRP"). While one might challenge the basis for the inclusion or exclusion of specific attributes or of the relative weighting assigned to each attribute, the evaluative methodology and tools appear to have been developed and used as part of a thoughtful and deliberative process that seeks to grapple honestly with the trade-offs among competing CVPS and policy objectives.

CVPS acknowledges that the PPA was not the least expensive of the submitted proposals in terms of absolute expected cost, and that prices under the PPA will be slightly higher than current projections of market prices (though less volatile). The PPA did compare favorably to the prices of other new renewable alternatives that are presently available, and the Department's

assessment is that the PPA represented the best of the available premium renewable proposals in terms of meeting new-renewable-energy standards under state law.

From the prefiled testimony submitted by CVPS, it is not completely clear how the PPA would have ranked among the submitted proposals without its premium renewable attributes.¹⁰ However, as discussed above in connection with the Section 248(b)(2) criterion, there exists a need for CVPS to include some new renewable resources in its long-term supply portfolio to meet the objectives for new renewable resources established in state law. Any analysis of economic benefit, therefore, would have to take account of the presumed need to include some new renewable resources in the long-term committed supply portfolio. With this need presumed, there is ample evidence in the record to conclude that the PPA was the best of all available options for new renewable resources among the submitted proposals.

Furthermore, the principles of least-cost planning under Section 218c require the consideration of both economic and environmental costs, and provide that economic costs be determined with regard to greenhouse gas risks and reduction goals. In previous orders, the Board has recognized the economic and other benefits of wind resources to Vermont and the region.¹¹ These benefits include increasing the technology and fuel diversity of supply resources and reducing air emissions and any adverse economic impact from prospective federal legislation and regulation related to global climate change.¹² The PPA provides a long-term, stably priced contract for this resource from an out-of-state facility.

One of the principal disadvantages of wind as a supply resource is its intermittent nature and the lack of control over the timing and amount of energy it generates. Under the PPA, CVPS will be required to purchase only the power actually produced by the Project. In addition, CVPS will pay less for power produced during off-peak periods. CVPS has room for an intermittent wind source in its portfolio because purchases under the PPA will represent a small share of total

10. The Scorecard developed by CVPS to evaluate the RFP proposals assigned a 5% weighting to the SPEED eligibility attributes of a proposal and a 7% weighting to its renewable/sustainable attributes. *See* exh. CVPS-KWS-4 at 3.

11. Docket No. 7156, Order of 8/8/07 at 3 and 38-39; Docket No. 6911, Order of 7/17/06 at 101-102.

12. *Id.*; *see also* 30 V.S.A. § 8001(a).

supply. CVPS expects to consider the risks related to this intermittent resource as it adds other new resources.

In summary, the PPA is expected to be an economic benefit to Vermont by providing a new, long-term power resource for CVPS at prices that are relatively stable and compare favorably to the prices of other available, new renewable resources. It will diversify CVPS's long-term supply portfolio by adding wind power to its committed supply resources. Economic benefits may also be realized by the absence of any requirement for CVPS to post collateral and through the sale or retention of RECs.

Integrated Resource Planning
30 V.S.A. § 248(b)(6)

56. The purchase under the PPA is consistent with the principles for resource selection expressed in the most recent least-cost integrated plan of CVPS. *See* finding 57, below; Shields pf. at 4; exh. CVPS-DPS-1 at 3.

57. The PPA is part of CVPS's efforts to implement the power supply portion of its 2007 IRP through a diverse program of competitive RFP processes and bilateral negotiations. The PPA resulted from the application of screening and evaluation tools used to identify and select among RFP proposals for new supply resources. These tools were reviewed in workshops in the IRP proceeding in Docket 7284. Deehan pf. at 3, 12 and 16; *see* findings 15 to 29, above.

Discussion

The IRP is subject to Board approval in Docket 7284. A proposal for decision by the hearing officer in that docket that recommended Board approval of the IRP was circulated to the parties in that docket on November 20, 2009.¹³ The IRP identifies new renewable electricity sources, such as the wind power generated by the Project, as one of several types of electric supply resources that should have priority in the Company's planning and procurement activities.¹⁴

13. Docket 7284, Proposal for Decision re Investigation into Central Vermont Public Service Corporation's 2007 Integrated Resource Plan (11/20/09).

14. IRP at 2, 24, 93-94.

Compliance with Electric Energy Plan
30 V.S.A. § 248(b)(7)

58. The purchase of power under the PPA is in compliance with the electric energy plan approved by the Department under Section 202 of Title 30. *See* finding 59, below, and findings 46 and 51, above; Deehan pf. at 16; exh. CVPS-DPS-1 at 4.

59. The Department has determined, after a review of the petition and other information, that the PPA is consistent with the *Vermont Electric Plan 2005* and has issued a determination letter under 30 V.S.A. § 202(f) to that effect. Exh. CVPS-DPS-2.

Outstanding Resource Waters
30 V.S.A. § 248(b)(8)

60. The purchase under the PPA does not involve a facility affecting or located on any segment of the waters of the state that has been designated as outstanding resource waters by the Water Resources Board. Upton pf. at 3; exh. CVPS-DPS-1 at 4.

Service by Existing Infrastructure
30 V.S.A. 248(b)(10)

61. The purchase of power under the PPA can be served economically by existing or planned transmission resources without undue adverse effect on Vermont utilities or customers. No upgrades to existing or planned transmission facilities are required in Vermont. Jones pf. at 2 and 4; findings 5 and 39-42, above; exh. CVPS-DPS-1 at 4.

IV. DISCUSSION

As CVPS notes:

[T]his investigation is the first request for the issuance of a CPG pursuant to 30 V.S.A. § 248 for a long-term stable-priced supply arrangement since Central Vermont participated in the proceedings to implement its purchase of power from Hydro Quebec ("HQ") under the Vermont Joint Owners Contract (the "HQ/VJO Contract") in the late 1980s. It is also the first supply arrangement requiring a CPG entered into by the Company to begin the process of replacing its committed but terminating supply resources (including the HQ/VJO Contract).¹⁵

15. CVPS Brief (4/14/10) at 2-3.

Given the need for CVPS to obtain new committed supply resources as existing supply arrangements expire over the next several years, it is expected that CVPS will be entering into more significant, long-term supply arrangements with out-of-state providers in the near future for which Board approval will be required.

Significant changes in state law have occurred since the Board last approved an out-of-state purchase power agreement, and there exists little guidance as to how Section 248(b) criteria applicable to out-of-state power purchases should be adjusted, applied or interpreted in light of these changes in state law. CVPS, the Department, and GMP in Docket 7590, have each provided their views as to how these changes in state law affect the application of Section 248(b) criteria.

While the briefing of these issues in this docket has been helpful, it must be emphasized that the proceedings in this docket may provide only limited guidance with respect to future petitions seeking CPGs for power purchase agreements. Among other things, the evidentiary bases of support for the conclusion in this docket that the PPA promotes the general good of the state may be inadequate to support such a finding in future proceedings. For example, the more significant commitments to purchase out-of-state power expected to come before the Board in the near future will require substantially more evidentiary support and analysis than was provided with this petition. In addition to building a more detailed evidentiary record, CVPS should also seek to address each of the criteria under 248(b) more directly and with greater analytical rigor. Furthermore, CVPS should not expect that the relatively short time period in which the Department and the Board reviewed this petition will be applicable to the consideration of future petitions.¹⁶

A review of the evidentiary submissions of CVPS in this docket and GMP in Docket 7590 reveals some significant differences. In addition to differences in the evidentiary records in the two dockets and substantive differences of opinion related to, for example, the integration of SPEED goals into Section 248 requirements, there was also a difference in emphasis and approach in seeking to meet the burden of proof to support the issuance of a CPG. CVPS

16. In this instance, both the Department and the Board made significant efforts to accommodate the desired timetable of CVPS, which was dictated by contractual provisions of the PPA.

emphasized the solicitation, evaluation and selection process to a much greater extent than GMP.¹⁷ Through this emphasis, CVPS provided important information about the basis and quality of its decision-making process in the selection of the PPA. On the other hand, GMP provided more direct and specific evidence in addressing the applicable criteria under Section 248. The hearing officers believe that CVPS and GMP could each benefit from adopting the strengths of the other's approach in future petitions.

As CVPS has acknowledged both in its prefiled testimony and in the design of its evaluation methodology and tools, the selection of power supply resources is a complicated judgment that involves significant trade-offs among a wide variety of relevant factors. Changes in state law since the last out-of-state power contract was approved appear to have increased the number and variety of factors that need to be considered in assessing potential supply resources.

The need to make trade-offs in evaluating power-supply arrangements is nothing new. Significant trade-offs are present even in basic pricing decisions, as lower current prices must be weighed against anticipated future volatility. While quantitative tools may assist the decision-making process with respect to certain trade-offs, the selection of power-supply resources ultimately will involve subjective judgments about relevant criteria, the appropriate weighting of relevant criteria and the application of such weighted criteria to specific proposals. From the Board's perspective, it is important that these judgments are as well-informed and well-supported as possible in the context of the requirements and objectives of state law.

CVPS should be commended for what seems to be a good-faith attempt to develop and apply, in a thoughtful and deliberative manner, detailed methodologies and tools to screen and evaluate competing proposals for supply resources. Based on the testimony of CVPS's witnesses in this proceeding, these evaluative methodologies and tools appear to have considerable value in the assessment and selection of power-supply resources from among competing proposals. At the same time, the issuance of a CPG in this proceeding should not be interpreted as an endorsement of the evaluation methodologies and tools that will have applicability in future proceedings. In particular, in future proceedings, the Board may have questions about, among

17. The difference in presentation may have resulted in part from CVPS's desire to provide support for its "economically used and useful" determination request.

other things, the inclusion or exclusion of specific attributes or the relative weights assigned to the attributes in assessing proposals. Such questions were not viewed as relevant to this proceeding because of the relatively small size of the purchase under the PPA, the comparative merits of the PPA and the uncontested nature of this proceeding.

With respect to this proceeding, CVPS has made a sufficient showing to satisfy the applicable requirements of Section 248 as detailed in the findings above. The purchase of power by CVPS under the PPA will help meet the need for new committed power resources and will add new renewable resources to the long-term power-supply portfolio of CVPS. The price of this resource under the PPA is relatively stable and is priced competitively relative to similar renewable resources. By adding a wind resource to its committed supply portfolio, CVPS has increased its technology and fuel diversity and has done so in a manner that would appear to minimize some of the risks associated with this resource.

V. CONCLUSION

Based on the record and findings set forth above, I conclude that the purchase by CVPS of electric capacity and energy under the PPA will promote the general good of the state, and recommend that the Board issue a certificate of public good to this effect.

This Proposal for Decision has been served on all parties to this proceeding in accordance with 3 V.S.A. § 811.

Dated at Montpelier, Vermont, this 12th day of May, 2010.

s/ Lars Bang-Jensen

Lars Bang-Jensen
Hearing Officer

VI. BOARD DISCUSSION

None of the parties recommended any changes to the Hearing Officer's proposal for decision. CVPS filed a letter on May 10, 2010, stating that it supports adoption of the proposal for decision by the Board.

In a filing on May 11, 2010, the Department stated that it supports adoption of the proposal for decision. The Department noted that its objection to using SPEED goals as a basis for the support of this PPA resulted from (i) its belief that the merits of the PPA were sufficient for its approval without regard to SPEED goals, and (ii) a desire to find common ground with the petitioners in Docket 7589 and Docket 7590 on as narrow a basis as possible given the demands of an expedited schedule. The Department states that its position in these proceedings was not intended to disparage SPEED goals or the efforts of the state's distribution utilities to meet state energy objectives, including SPEED goals. The Department views the proposal for decision "as a template for the approval of future out-of-state power purchase agreements and agrees that the relationship among Section 248, the Energy Efficiency Utility and the SPEED program is one factor to be considered when reviewing petitions under Section 248."

The Board believes that the discussion of issues by the Hearing Officer provides some helpful and constructive guidance with respect to future petitions related to out-of-state power agreements. Furthermore, the Board supports the findings, conclusions and recommendations of the Hearing Officer in this proceeding. However, the Board wishes to emphasize that its decision in this proceeding is specific to the facts and circumstances involving this particular power purchase agreement, including the amount of power to be purchased under the PPA and the fact that there was a settlement among all of the parties. As such, the Board's Order in this docket adopting the Hearing Officer's proposal for decision may have limited relevance to the Board's evaluation of future power purchase agreements.

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED AND DECREED by the Public Service Board of the State of Vermont that:

1. The findings, discussions and conclusions of the Hearing Officer are adopted in their entirety.
2. The Memorandum of Understanding, dated March 10, 2010, between Central Vermont Public Service Corporation and the Vermont Department of Public Service is approved in its entirety.
3. The purchase of capacity and energy by Central Vermont Public Service Corporation under the Renewable Energy Purchase Agreement, dated December 16, 2009, with Granite Reliable Power, LLC, will promote the general good of the state, and a certificate of public good to that effect shall be issued.

Dated at Montpelier, Vermont, this 13th day of May, 2010.

<u>s/ James Volz</u>)	
)	
)	PUBLIC SERVICE
<u>s/ David C. Coen</u>)	
)	
)	BOARD
)	
)	OF VERMONT
<u>s/ John D. Burke</u>)	

OFFICE OF THE CLERK

FILED: May 13, 2010

ATTEST: s/ Susan M. Hudson
Clerk of the Board

NOTICE TO READERS: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Board (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: psb.clerk@state.vt.us)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Board within thirty days. Appeal will not stay the effect of this Order, absent further Order by this Board or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Board within ten days of the date of this decision and order.